



The Application of a Deep Learning Strategies in English Language Learning in Indonesia: A Library Research

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Article Info	Abstract
Article History Received: 2026-02-05 Revised: 2026-03-10 Published: 2026-04-05 Keywords: <i>English Language Learning;</i> <i>Deep Learning Approach;</i> <i>PBL;</i> <i>Pjbl;</i> <i>IBL;</i> <i>Flipped Classroom;</i> <i>Language Skills;</i> <i>Critical Thinking.</i>	This study examines the Application of deep learning-based teaching strategies in English language learning in Indonesia, aiming to enhance language proficiency and higher-order thinking skills. The approach emphasizes conceptual understanding, critical thinking, and student learning preferences. Strategies explored include Problem-Based Learning (PBL), Project-Based Learning (PjBL), Inquiry-Based Learning (IBL), and Flipped Classroom, which encourage active participation and deeper engagement. Using a qualitative descriptive library research approach, the analysis of relevant literature reveals that deep learning strategies significantly enhance language skills (speaking, writing, listening, reading) by promoting authentic communication and real-world application. Additionally, these strategies foster critical thinking, creativity, and problem-solving abilities, essential for language learners. The findings indicate that deep learning strategies are effective in improving students' language competencies and preparing them for complex real-world challenges. In conclusion, integrating deep learning-based teaching strategies provides an effective approach to improving language proficiency and higher-order thinking skills in English language learning, supporting more meaningful and student-centered learning experiences.

Artikel Info	Abstrak
Sejarah Artikel Diterima: 2026-02-05 Direvisi: 2026-03-10 Dipublikasi: 2026-04-05 Kata kunci: <i>Pembelajaran Bahasa Inggris;</i> <i>Pendekatan Pembelajaran Mendalam;</i> <i>PBL;</i> <i>Pjbl;</i> <i>IBL;</i> <i>Kelas Terbalik;</i> <i>Keterampilan Bahasa;</i> <i>Berpikir Kritis.</i>	Studi ini meneliti penerapan strategi pengajaran berbasis pembelajaran mendalam dalam pembelajaran bahasa Inggris di Indonesia, yang bertujuan untuk meningkatkan kemampuan berbahasa dan keterampilan berpikir tingkat tinggi. Pendekatan ini menekankan pemahaman konseptual, berpikir kritis, dan preferensi belajar siswa. Strategi yang dieksplorasi meliputi Pembelajaran Berbasis Masalah (PBL), Pembelajaran Berbasis Proyek (PjBL), Pembelajaran Berbasis Inkuiri (IBL), dan Kelas Terbalik (Flipped Classroom), yang mendorong partisipasi aktif dan keterlibatan yang lebih dalam. Dengan menggunakan pendekatan penelitian pustaka deskriptif kualitatif, analisis literatur yang relevan mengungkapkan bahwa strategi pembelajaran mendalam secara signifikan meningkatkan keterampilan berbahasa (berbicara, menulis, mendengarkan, membaca) dengan mempromosikan komunikasi autentik dan penerapan di dunia nyata. Selain itu, strategi ini menumbuhkan berpikir kritis, kreativitas, dan kemampuan pemecahan masalah, yang penting bagi pembelajar bahasa. Temuan menunjukkan bahwa strategi pembelajaran mendalam efektif dalam meningkatkan kompetensi berbahasa siswa dan mempersiapkan mereka untuk menghadapi tantangan dunia nyata yang kompleks. Kesimpulannya, mengintegrasikan strategi pengajaran berbasis pembelajaran mendalam memberikan pendekatan yang efektif untuk meningkatkan kemampuan berbahasa dan keterampilan berpikir tingkat tinggi dalam pembelajaran bahasa Inggris, mendukung pengalaman belajar yang lebih bermakna dan berpusat pada siswa.

I. INTRODUCTION

English proficiency has become an essential competence for students in the global era, particularly in the context of communication, academic participation, and access to information. Being able to speak in English is widely considered one of the main goals of learning the language in schools because it enables students to express ideas, engage in discussions, and interact effectively in various

contexts (Priyanto & Chen, 2023). In response to these demands, the Indonesian education system through the Merdeka Curriculum has established specific learning outcomes that emphasize the development of comprehensive language skills. In Phase D, students are expected to demonstrate the ability to think and communicate effectively in academic, social, and purposeful contexts. They should be able to comprehend, process, and interpret information from various sources and

actively respond to both fictional and non-fictional texts. Furthermore, students are expected to express their ideas and experiences in an organized manner through oral and written communication.

Language learning in the Merdeka Curriculum integrates four essential elements of language skills: listening, speaking and presenting, reading and viewing, and writing. These skills play an important role in helping students understand and communicate information effectively. Through exposure to various literary works and texts, students are expected to strengthen their character development and language competencies. In the listening element, students are required to understand and interpret information presented in different formats, such as dialogues, monologues, speeches, and other audiovisual materials. The ability to listen effectively allows students to analyze ideas, opinions, instructions, and messages from diverse contexts, which contributes to the development of critical and analytical thinking skills (Widodo, 2024).

Similarly, reading and viewing skills enable students to explore and evaluate various types of information obtained from texts and visual materials. Students learn to interpret ideas, opinions, and messages presented in both fictional and non-fictional texts. These skills support students in developing deeper comprehension and analytical abilities, allowing them to critically evaluate the information they encounter (Lee & Chen, 2024). Meanwhile, speaking and presenting skills enable students to express ideas, opinions, and solutions orally in order to participate actively in discussions and problem-solving activities. Effective speaking skills also foster confidence and enhance students' ability to communicate ideas clearly and persuasively (Kusuma & Nur, 2024).

Writing skills are equally important in enabling students to communicate ideas in a structured and meaningful manner. Students are expected to write various types of texts to convey ideas, opinions, and experiences for different purposes. Through writing activities, students develop their critical, creative, and communicative thinking skills while improving their ability to organize and present information effectively (Sari & Priyanto, 2024). Therefore, these four language elements must be integrated in English language instruction to ensure that the learning objectives of Phase D are achieved effectively.

However, in practice, the development of students' English language skills is often not optimal. Several challenges still occur in classroom learning. Firstly, learning activities tend to focus on surface-level understanding, where teachers mainly explain concepts without facilitating deeper exploration of the material. Secondly, students often lack clear awareness of the competencies they are expected to achieve after the learning process. Third, learning activities sometimes do not accommodate students' diverse learning styles and needs. As a result, students may struggle to develop higher-order thinking skills and meaningful understanding of the language.

To address these challenges, the application of innovative learning strategies that promote deeper understanding is necessary. One promising approach is the deep learning approach, which emphasizes meaningful, reflective, and active learning processes (Kristanto & Wulandari, 2024). Deep learning encourages students not only to acquire knowledge but also to critically analyze information, connect new knowledge with prior experiences, and apply their understanding in real-life situations. This approach also supports the development of higher-order thinking skills, collaboration, and learner autonomy.

Several studies have highlighted the effectiveness of student-centered learning models in supporting deep learning processes. For example, Problem-Based Learning (PBL) encourages students to solve real-world problems through discussion and critical analysis. Project-Based Learning (PjBL) allows students to develop knowledge and skills by working on meaningful projects. Inquiry-Based Learning (IBL) promotes exploration and questioning as students construct knowledge through investigation. Meanwhile, the Flipped Classroom model provides opportunities for students to engage with learning materials independently before participating in collaborative classroom activities.

Although previous studies have explored the effectiveness of these individual learning models, most research has examined them separately or focused on specific language skills. There is still limited research that integrates multiple student-centered learning models within the framework of a deep learning approach to improve comprehensive English language skills in the context of the Merdeka Curriculum. This gap indicates the need for further studies that

examine how different learning models can be combined to support deep learning and enhance students' language competencies simultaneously.

Therefore, the novelty of this study lies in the integration of four student-centered learning approaches—Problem-Based Learning, Project-Based Learning, Inquiry-Based Learning, and Flipped Classroom—within the deep learning framework to support the development of four English language skills simultaneously. By applying these strategies in a structured manner, this study seeks to provide a more holistic strategy for improving students' language competencies while promoting critical thinking, collaboration, and meaningful learning experiences.

Based on this background, the objectives of this study are: (1) To analyze the concept of deep learning in the context of English language learning. (2) To examine how the application of deep learning through Problem-Based Learning (PBL), Project-Based Learning (PjBL), Inquiry-Based Learning (IBL), and Flipped Classroom can improve students' English language skills. Thus, the findings of this study are expected to provide theoretical and practical contributions to English language teaching by offering an integrated instructional strategies that supports meaningful and effective learning in accordance with the goals of the Merdeka Curriculum.

II. METHOD

This study is library research. Library research is a research method that involves collecting, reading, analyzing, and evaluating information contained in various literature or documents relevant to the topic being researched (Creswell & Creswell, 2025). The steps taken in a literature review are as follows.

1. Identifying Literature Sources

Identifying literature sources involves gathering, evaluating, and selecting relevant reading materials or references to support research or study. According to Mertler & Vannatta, (2024) literature sources can include books, journal articles, proceedings, research reports, official documents, or other media providing information or theories related to the researched topic.

2. Selecting Relevant Literature

The obtained literature is selected to determine its relevance to the topic of study. Selection is based on the credibility of the literature (published by a trusted institution)

and its currency (Galvan & Galvan, 2025). These factors ensure the literature's reliability and applicability to the research.

3. Analyzing Literature

Analyzing literature is done to find out, identify, understand, and evaluate information from relevant sources (Bloomfield & Fisher, 2024). Understanding is carried out in depth so that information related to deep learning and English language learning is obtained. Information obtained from various literatures is compared to determine.

- a) Identifying similarities involves searching for commonalities among various literature to determine shared aspects. According to Hart (2025), identifying similarities in literature is a process of recognizing patterns, themes, or elements that are similar across different literature or previous studies, facilitating a deeper understanding of the research topic.
- b) Identifying differences in research involves finding variability between one literature and another, this is necessary because different literature often presents different perspectives (Ridley, 2024). Regarding this study, there are differing views on the concept of deep learning, with some interpreting it as a curriculum, others as an approach, and some as a method. This highlights the importance of conducting literature analysis to draw a conclusion that deep learning is an approach.

III. RESULT AND DISCUSSION

Deep learning in education refers to a learning strategy that encourages students to understand concepts comprehensively, relate knowledge to real-life situations, and actively construct meaning through learning activities. Unlike rote learning, which emphasizes memorization, deep learning focuses on sustainable, active, and collaborative learning processes. According to previous studies, deep learning involves three main principles: meaningful learning, mindful learning, and joyful learning (Hidayat & Nurhasan, 2023).

The application of deep learning in English language learning can be carried out through various student-centered learning models. In this study, four learning models were applied to support the development of language skills: Problem-Based Learning (PBL) for reading and speaking, Project-Based Learning (PjBL) for

writing, Inquiry-Based Learning (IBL) for listening, and Flipped Classroom for reading and viewing.

Problem-Based Learning (PBL) was applied in reading and speaking activities. In this model, students were presented with contextual problems related to real-life situations. They were required to analyze reading texts, identify key issues, discuss possible solutions, and present their ideas orally. This strategy encourages students to develop critical thinking and communication skills because they must interpret information from texts and articulate their ideas during discussions. Through collaborative problem-solving activities, students become more actively involved in the learning process and demonstrate greater engagement in reading and speaking tasks.

Project-Based Learning (PjBL) was applied to develop students' writing skills. In this activity, students worked collaboratively to produce short stories based on local wisdom. The project required students to plan story ideas, draft narratives, revise their work, and compile their stories into a collective storybook. This process allowed students to practice writing in a meaningful context while developing creativity and collaboration. By producing a tangible product, students experienced authentic learning that connected language learning with cultural understanding and creative expression.

Inquiry-Based Learning (IBL) was applied in listening activities. Students were encouraged to formulate questions before listening to lectures or public discussions. During the listening process, they analyzed key information, identified main ideas, and discussed their findings with peers. This inquiry process helped students become more aware of their learning objectives and improved their ability to process auditory information critically. The active engagement in questioning and investigating information indicates that students were not merely passive listeners but active participants in constructing knowledge.

Meanwhile, the Flipped Classroom model was applied to reading and viewing activities. In this strategy, students studied basic materials independently outside the classroom through videos or reading resources. Classroom time was then used for discussions, collaborative tasks, and deeper analysis of the material. This method allowed students to learn at their own pace before engaging in interactive learning activities during class sessions.

The findings of this study demonstrate that the integration of these four learning models effectively supports the principles of deep learning. Firstly, learning becomes more meaningful when the learning materials are connected to students' real-life contexts. In PBL and IBL activities, social and environmental issues close to students' experiences help them relate new knowledge to their previous experiences (Kurniawan & Setiawan, 2024). This is consistent with constructivist learning theory, which emphasizes that knowledge is actively constructed by individuals through the integration of new experiences with existing cognitive structures (Suryanto & Lestari, 2025).

Secondly, the learning process also promotes mindful learning, where students demonstrate awareness of their learning goals and strategies. The stages of formulating questions before listening in IBL and exploring problems in PBL encourage students to learn with clear and focused objectives (Wijaya & Hartono, 2024). Students actively analyze texts, participate in discussions, and evaluate information, which indicates that they are engaging in reflective and critical thinking processes rather than passively receiving information (Fahmi & Rohmah, 2025).

Thirdly, the implementation of project-based activities and collaborative learning environments contributes to joyful learning. Students show high levels of enthusiasm and motivation when they are given opportunities to create meaningful products such as storybooks. Collaborative projects and group discussions also create a more dynamic and engaging classroom atmosphere (Pratiwi & Sulistyowati, 2023).

Another important finding is the role of learning differentiation in supporting deep learning. By allowing flexibility in learning processes and final products, teachers can accommodate students' interests, readiness levels, and learning styles. Such differentiation helps create a more inclusive and positive learning environment that supports students' engagement and participation (Astuti & Kusuma, 2023).

From a broader perspective, the application of deep learning through these four instructional strategies also contributes to the development of 21st-century skills, including critical thinking, creativity, collaboration, communication, and digital literacy (Rizki & Nugroho, 2025). These competencies are essential for students to adapt to global challenges and technological advancements.

The findings also highlight important implications for English language teaching practices. Teachers are encouraged to shift their roles from being the sole source of information to becoming facilitators who guide students in constructing knowledge independently. Selecting appropriate learning strategies should consider the characteristics of students as well as the contextual relevance of learning materials (Hasan & Wardani, 2023). In addition, the consistent application of contextual, collaborative, and reflective learning strategies can significantly improve the quality of English language instruction and help ensure that learning experiences remain meaningful and sustainable (Sutrisno & Putri, 2024).

Overall, this study demonstrates that the integration of deep learning principles in English language instruction not only improves students' language proficiency but also fosters the development of higher-order thinking skills and transversal competencies needed in the 21st century.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

The application of deep learning strategies in English language learning has been shown to significantly enhance students' hearing, reading, speaking, and writing abilities. This strategy emphasizes the development of deep conceptual knowledge, fosters critical thinking abilities, and takes into account the diverse learning preferences of pupils. By incorporating inquiry-based learning (IBL), project-based learning (PjBL), and problem-based learning (PBL) techniques, educators can improve students' problem-solving abilities, critical thinking skills, and overall involvement in the learning process. The Flipped Classroom approach also plays a crucial role in increasing students' participation and readiness to learn, leading to a more engaging and effective learning environment. As a result, students are better equipped to handle the complexities of the digital age, think critically, and communicate effectively. The integration of deep learning strategies in English language instruction is therefore essential for promoting academic success, fostering lifelong learning, and preparing students for future challenges. By adopting this strategy, educators can create a student-centered learning environment that promotes deeper understanding, creativity,

and innovation, ultimately leading to improved learning outcomes and a more successful future for students.

B. Suggestion

English language teachers are recommended to integrate deep learning strategies, such as Problem-Based Learning (PBL), Project-Based Learning (PjBL), Inquiry-Based Learning (IBL), and Flipped Classroom, into English language instruction to enhance students' language abilities. Teachers can use these strategies to develop students' critical thinking skills, such as analyzing, evaluating, and creating, to prepare them for global challenges. Deep learning strategies can increase student engagement in learning, so teachers are advised to create an interactive and enjoyable learning environment. Additionally, teachers can utilize technology to support deep learning strategies, such as using online platforms for discussions, collaboration, and presentations. The English language curriculum can also be developed to incorporate deep learning strategies, enabling students to acquire better language skills and prepare for global challenges. By implementing deep learning strategies, it is expected that the quality of English language instruction can be improved, and students can achieve better learning outcomes.

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